

DETAILED ACTION

1. This office action is in response to communication filed on 1/20/2010.

Claims 1-8, 10-15, 19-21, 24-29, 33-34, 38-40 and 44-46 remain pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-7, 10, 13, 20, 21, 24, 27, 34, 38-40, 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel et al US 6,171,327.

Claims 1, 10 and 44-46: Daniel et al disclose an elongate shaft 112 including a longitudinally extending proximal section 114 having a distal end, a longitudinally extending distal section having a proximal end, and a connector 132 connecting the proximal section and the distal section 116 of the elongate shaft, wherein the connector is fixedly secured to both the proximal section and the distal section (fig. 4), securing the distal end of the proximal section with the proximal end of the distal section. Daniel, fig. 4 is silent regarding a filter coupled to the shaft. However, Daniel teaches a filter 21 coupled to the shaft (fig. 9, element 112). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Daniel's fig. 4 with a filter coupled to the shaft as taught by Daniel in other embodiment (figure. 9) in order to filter plaque, thrombus which releases into the blood stream during invasive procedures that performed in blood vessels. As to claims 4-7, 13, 20, 21, 24, 27, 34 and

38-40, Daniel et al, figures 4, 9, teach the medical device as recited in claims 1, 10, 24 and 39 above would also apply to these claims as well.

With regard to claims 45, 46: Daniel et al disclose the claimed invention except for the filter is disposed proximal or distal to the connector. It would have been obvious matter of design choice to a person of ordinary skill in the art to modify Daniel's medical device (fig. 4) with the filter is disposed proximal or distal to the connector, since applicant has not disclosed that the filter is disposed proximal or distal to the connector solves any stated problem or is for any particular purpose and it appears that the invention would have filter 21 (fig. 9) disposed proximally or distally of the connector (fig. 4) without departing from the spirit of the invention.

Claims 2, 3, 6, 11-12, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel et al in view of Stevens et al 6,029,671.

With regard to claims 2, 3, 6, 11-12, 25-26: Daniel et al disclose the claimed invention except for the proximal section comprises a first material (stainless steel) and the distal section comprises a second material (nickel titanium alloy) that is different from the first material, and where the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility. Stevens et al teach the proximal section comprises a first material (stainless steel) and the distal section comprises a second material (nickel titanium alloy) that is different from the first material (fig. 4a, disclose the proximal section 440 and distal section 446 have different material), and where the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility (see col. 11, lines 36-40 and col. 13, lines 48-56). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the system of Daniel with

the proximal section comprises a first material (stainless steel) and the distal section comprises a second material (nickel titanium alloy) that is different from the first material, and where the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility as taught by Stevens et al in order to allow variable bending stiffness in various regions (see col. 13, lines 48-64).

Claims 4, 5, 7, 8, 13, 27, 38: Daniel et al disclose the connector 132 comprises a third material that is compatible for bonding to both the first and second material, or the connector is welded to both the first and second material, or the connector blends the first flexibility with the second flexibility and the connector is disposed over the distal end of the proximal section and the proximal end of the distal section (fig. 4).

Claims 24, 29, and 40: Daniel discloses the invention substantially as claimed see the above rejections of claims 1 and 10 and further including the limitations of a filter assembly coupled to the filter wire (figures 7, 9), the filter assembly includes a filter frame 118 or 124 and a filter membrane 122 coupled to the filter.

Claims 14, 28: Daniel discloses the invention substantially as claimed except for the third material comprises a nickel-chromium alloy. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device included for the third material comprises a nickel-chromium alloy, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 20, 21, 34: Daniel et al disclose the device further comprises a covering over a portion of the core member, and wherein the covering comprises a polymer sheath (item 182, col. 2, lines 13-16).

With regard to claims 15, 19, 29, 33: Daniel et al disclose the claimed invention except for a reduced cross sectional area is defined adjacent at least one of the distal end of the proximal region and the proximal end of the distal region, wherein both the proximal region and the distal region include a reduced cross sectional area, and wherein the reduced cross sectional area of the proximal region and the reduced cross sectional area of the distal region are joined together to define a butt joint. It would have been obvious matter of design choice to a person of ordinary skill in the art to modify Daniel's medical device (fig. 4) with the reduced cross sectional area is defined adjacent at least one of the distal end of the proximal region and the proximal end of the distal region, wherein both the proximal region and the distal region include a reduced cross sectional area, and wherein the reduced cross sectional area of the proximal region and the reduced cross sectional area of the distal region are joined together to define a butt joint solves any stated problem or is for any particular purpose and it appears that the invention would have the proximal region and the distal region include a reduced cross sectional area, and wherein the reduced cross sectional area of the proximal region and the reduced cross sectional area of the distal region are joined together to define a butt without departing from the spirit of the invention.

Response to Arguments

3. Applicant's arguments filed 1/20/2010 have been considered but they are not persuasive. Applicants state that Daniel does not appear to disclose a connector which connects a proximal

section and a distal section of an elongate shaft and a filter coupled to the shaft. Examiner disagrees. In fact, as seen in fig. 4 of Daniel discloses a connector 132 connecting the proximal section 114 and the distal section 116 of the elongate shaft 112, wherein the connector 132 is fixedly secured to both the proximal section and the distal section (fig. 4), securing the distal end of the proximal section with the proximal end of the distal section. Daniel, fig. 4 is silent regarding a filter coupled to the shaft. However, Daniel teaches a filter 21 coupled to the shaft (fig. 9, element 112). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Daniel's fig. 4 with a filter coupled to the shaft as taught by Daniel in other embodiment (figure. 9) in order to filter plaque, thrombus which releases into the blood stream during invasive procedures that performed in blood vessels. The phrase “a filter coupled to the shaft” in the claim is broad enough to mean that “something that joints, or links, or engages two things together” as evidence by “Merriam-Webster on line dictionary. Thus, the filter 21, fig. 9 of Daniel appears to be coupled or engaged to the shaft 112. There is nothing claimed which prohibits this interpretation of the prior art to be used as the filter 21, fig. 9 of Daniel appears to be coupled or engaged to the shaft 112.

The applicants argue that neither Daniel in view of Stevens teaches the claimed invention as recited in claims 2-3, 6, 11-12, 25-26. Examiner disagrees. It is noted that Stevens et al teach the proximal section comprises a first material (stainless steel) and the distal section comprises a second material (nickel titanium alloy) that is different from the first material (fig. 4a, disclose the proximal section 440 and distal section 446 have different material), and where the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility (see col. 11, lines 36-40 and col. 13, lines 48-56). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the system of Daniel with the proximal section comprises a first material (stainless steel) and the distal section comprises a second material (nickel titanium alloy) that is different from the first material, and where the first material has a first flexibility and the second material has a second flexibility that is more flexible than the first flexibility as taught by Stevens et al in order to allow variable bending stiffness in various regions (see col. 13, lines 48-64). As broadly as claimed Daniel in view of Stevens is thereby weighing in favor of a finding of obviousness.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR X. NGUYEN whose telephone number is (571)272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VN/
Examiner, Art Unit 3731
4/23/2010

/Gary Jackson/
Supervisory Patent Trainer
TC 3700
April 25, 2010

Application/Control Number: 10/616,785
Art Unit: 3731

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